

ABSTRACT

A substrate processing chamber component is a structure having an integral surface coating comprising an yttrium-aluminum compound. The component may be fabricated by forming a metal alloy comprising yttrium and aluminum into the component shape and anodizing its surface to form an integral anodized surface coating. The chamber component may be also formed by ion implanting material in a preformed metal shape. The component may be one or more of a chamber wall, substrate support, substrate transport, gas supply, gas energizer and gas exhaust.